

Title (en)

Integrated three-way solenoid valve.

Title (de)

Integriertes elektromagnetisches Dreiwegeventil.

Title (fr)

Soupape intégrable électromagnétique à trois canaux.

Publication

EP 0215272 A1 19870325 (EN)

Application

EP 86110889 A 19860806

Priority

US 77155085 A 19850903

Abstract (en)

An integrated solenoid actuated control valve useful in a fluid system such as an anti-lock braking system. The valve incorporates a solenoid actuated valve and a sliding valve responsive to differential pressure to provide fluid pressure isolation, build, and decay control in a single valve assembly.

IPC 1-7

F16K 31/10; **F16K 31/02**

IPC 8 full level

B60T 8/48 (2006.01); **B60T 8/1761** (2006.01); **B60T 8/36** (2006.01); **B60T 8/42** (2006.01); **B60T 8/50** (2006.01); **F16K 17/00** (2006.01)

CPC (source: EP KR US)

B60T 8/3615 (2013.01 - EP US); **B60T 8/4275** (2013.01 - EP US); **B60T 8/5025** (2013.01 - EP US); **B60T 8/5037** (2013.01 - EP US); **F16K 31/02** (2013.01 - KR); **Y10T 137/86622** (2015.04 - EP US); **Y10T 137/87217** (2015.04 - EP US)

Citation (search report)

- US 3395890 A 19680806 - ECKERT ARTHUR F J, et al
- US 4251051 A 19810217 - QUENNEVILLE RAYMOND N, et al
- DE 2600196 A1 19760708 - DBA SA
- DE 2637258 A1 19780223 - GEIMER JOSEF
- DE 2948874 A1 19810611 - BOSCH GMBH ROBERT [DE]
- DE 3207919 A1 19830915 - BOSCH GMBH ROBERT [DE]
- DE 2003739 A1 19710812 - BOSCH GMBH ROBERT
- DE 3311690 A1 19841011 - HEILMEIER & WEINLEIN [DE]

Cited by

FR2631301A1; US4936344A; AU623318B2; US5541097A; GB2252140A; EP0520844A1; FR2678228A1; US5333947A; WO9005658A1

Designated contracting state (EPC)

DE FR GB SE

DOCDB simple family (publication)

EP 0215272 A1 19870325; **EP 0215272 B1 19891025**; CA 1265172 A 19900130; DE 3666618 D1 19891130; ES 2002130 A6 19880716; JP H0790758 B2 19951004; JP S6255252 A 19870310; KR 870003335 A 19870416; US 4620565 A 19861104

DOCDB simple family (application)

EP 86110889 A 19860806; CA 517091 A 19860828; DE 3666618 T 19860806; ES 8601584 A 19860903; JP 20024786 A 19860828; KR 860007216 A 19860829; US 77155085 A 19850903